T. Prameela Kavya

Parijaat Nivas Room No:238, IIIT-Hyderabad, Gachibowli

📱 +91-8332930991 • ✉ prameela.kavya@students.iiit.ac.in
🌐 https://github.com/prameelakavya

Education

Academic Qualifications

IIIT Hyderabad **Gachibowli**
B.Tech. in Computer Science and Engineering, CGPA: 8.64(6 semesters), *2017(expected)*

Sri chaitanya educational Institute, Gudavalli **Vijayawada**
Intermediate, 97.8%, *2011–2013*

Gowtham Concept School, Gudiwada **Vijayawada**
S.S.C., 95.33%, *2010-2011*

Scholastic Acheivements

- Secured a rank of 5000(general category) in IIT-JEE Advanced examination in 2013.
- Secured a rank of 1450(general category) among 1.4 lakh applicants in IIT-JEE Mains examination in 2013.
- Stood among top 10 percent students in my batch and was selected for Deans list twice (a honorable appreciation for top students of the year) for years 2015, 2016.

Work Experience

- **Worked as an intern for Samsung Research Institute Bangalore(SRIB) (May 11, 2016 - July 7, 2016)**

  I was part of a two member team and worked in IMS-PTT (push to talk) area. I gained a basic knowledge of how SIP is used for normal calling and about IMS architecture. We were assigned the work of implementing chat POC(push to talk over cellular). Completed the task with the help of already implemented Pre-arranged chat group.

- **Teaching Assistant**

  Worked as a Teaching assistant under Prof Vikram Pudi in International Institute Of Information Technology for the course Introduction to Databases for the semester MONSOON 2015. Currently working under the same professor as TA for the current semester MONSOON'16 for the course Database systems

Notable Projects

- **Building an efficient neural network for games :**Research project(HONOURS) under Prof Praveen Paruchuri in center for Data Engineering (Ongoing)(May 14th, 2015)
  Being a two member team, we developed a neural net which recognizes Hand Written digits using supervised learning and tic-tac-toe neural net using reinforcement learning. Currently working on building an efficient semi-supervised neural net for the game 2048 using temporal difference and reinforcement learning. Programming language being used is python.

- **HMM based Machine Translation:**Semester project under Prof Manish Srivastava November 1st, 2016
  We as a 3 member team were expected to build a HMM based Machine Translation model for converting English sentences to Hindi. We were provided with a parallel corpus for training. Used Viterbi algorithm for prediction and Baum-Welch algorithm for re-estimation of HMM parameters.

- **Species and variety detection of Fruits and Vegetables from images:**Semester project under Prof Avinash sharma October 1st ,2015
  ●Developed a framework for recognizing the fruits and vegetables and their species .
  ●Basic approach is taken from a research paper by Shiv Ram Dubey and Anand Singh Jalal, GLM University.
  ●By applying different Pattern recognition techniques and improvised texture features, aiming at a larger set of fruits and vegetables(around 30000 images), able to achieve 75percent accuracy.

- **Medical Entity Recognition in Twitter Data :** Course Project under Prof Vasudeva Varma
  This project aims at parsing named entities and recognizing and classifying medical data into the relevant categories, namely drugs, diseases, symptoms, side-effects, treatment, etc. Twitter data will be the input and based on previous medical data from databases and ontologies, relevant medical terms have to be parsed and classified based on the category they belong to(ex: drug or a disease or cure etc..). A report on the procedure and results can be found at: http://prameelakavya.github.io/

Minor Projects

- **Artificial Agent for playing tic-tac toe :**Course Project under Prof Praveen Paruchuri in Artificial Intelligence
  - It's a project given to entire batch and our bots are played against each other in a tournament and my bot stood 4 th in the entire batch i.e., in among 200 students.
  - Implemented in python using alpha-beta pruning technique and efficient probabilistic utility function for getting next best move.
- **Search engine for Wiki dump :**Course Project under Prof Vasudeva Varma in Information Retrieval and Extraction
  The project aims at creating index for 40GB wiki dump (xml) (part of phase1) and then create a search engine basing on this index which should retrieve the documents relative to the given query and rank them(part of phase2). In phase2 I used tf-idf for ranking and produced top 5 results for the given search query.
- **Creating a Proxy Webserver :**Course Project under Prof Ganesh Iyer in Advanced Computer Networks
  We were to implement a caching web proxy that is able to handle concurrent clients through the use of multiple threads of execution, one per client request. Programming language used is python.
- **Online Site for managing resumes for a company :**Course Project under Prof Raghu Reddy in System Software Analysis and Design Built an online application for removing paper work of an HR and Manager of a company. To automate the procedure of selection of job applicants. Complete work flow from uploading of resume in the site and selection of applicants is automated except the interview part. It's a saas(Software as a Service) application and is completed using Progress Rollbase
- **Mini SQL Engine :**Course Project under Prof P. Krishna Reddy in Database systems
  Implemented some set of functionalities of SQL engine. Programming language used for this is python.
- **Online site for Bata showroom :**Course Project under Prof Radha Krishna in Introduction to Databses
  - Implemented everything from scratch i.e., right from drawing ER and converting it to EER and then finally to Relational schema and normalising it and then finally built a basic website (for the management of the database)where owner is given full permissions to insert, delete, update and see the products in the database and user is only given few permissions to view the data(Permission setting).
  - Languages used for this purpose are HTML, CSS, Javascript, PHP(Scripting language) and SQL(for managing database).
- **Mini linux terminal :**Course Project under Prof Suresh Purini in Operating Systems
  Implemented alomost all linux commands other than piping . Programming language used is C.

Technical Skills

- **Programming Languages:** C, C++(Basic), Python(Basic), Matlab.
- **Scripting languages:** Javascript, PHP (both basic).
- **Other tools/Languages:** HTML, CSS(basic), ARM architecture(just familiar with), Git
- **Frameworks/Platforms:** Progress Rollbase, Windows, Linux, Django(basic)

Relevant Courses

- C Programming, Digital Logic Processor, Information Technology Workshop I and II, Formal Methods, Computer Networks, Introduction to Databases, Computer System Organization, Operating Systems, Algorithms, Data Structures, Graphics, Artificial Intelligence, Digital Signal Analysis and Applications, Structured System Analysis and Design, Science I, Basic Electronic Circuits, Engineering Systems, Database Systems, Statistical Methods in Artificial Intelligence, Abstract Algebra, Game Theory for CS, Information Retrieval and Extraction, Optimization Methods, Science II, *NLP, *Advanced Computer Networks, *Game Design Engineering (* = ongoing).